

Notice of Allowability

Application No.

10/517,163

Examiner

Evan Pert

Applicant(s)

NAKATANI ET AL.

Art Unit

2826

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the application filed December 7, 2004.
2. ☒ The allowed claim(s) is/are 1-7.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 1204
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Lawrence Ashery on February 15, 2007.

The application has been amended as follows:

In claim 1, line 5, change "first wiring pattern, in which" to
--first wiring pattern, wherein, in the--

In claim 1, line 6, change "pattern the driving" to --pattern, the driving--.

In claim 2, line 3, change "which circuit board" to --the circuit board--.

In claim 2, line 7, change "in which" to --in the--.

In claim 2, line 8, change "pattern the driving" to --pattern, the driving--.

In claim 3, line 3, change "which circuit board" to --the circuit board--.

In claim 3, line 5, change "with electrode" to --with an electrode--.

In claim 3, line 9, change "switching element, in which" to
--switching element, wherein in the--.

In claim 3, line 10, change "pattern the driving" to --pattern, the driving--.

In claim 3, line 11, change "a wiring pattern" to --a further wiring pattern--.

In claim 3, line 12, change "to conductive board" to --the conductive board--.

In claim 4, line 1, change "claim 2 or claim 3" to --claim 2--.

In claim 4, line 3, change "capacitor with" to --capacitor with the--.

In claim 4, line 5, change "with capacitor, in which fourth" to --the capacitor, wherein, in the fourth-- and change "pattern the driving" to --pattern, the driving--.

In claim 5, line 1, change "claim 2 or claim 3" to --claim 2--.

In claim 5, line 2, change "in plasma" to --in the plasma--.

In claim 6, line 3, change "capacitor with" to --capacitor with the--.

In claim 6, line 5, change "with capacitor, in which fourth" to --the capacitor, wherein, in the fourth-- and change "pattern the driving" to --pattern, the driving--.

In claim 7, line 2, change "in plasma" to --in the plasma--.

Allowable Subject Matter

2. Claims 1-7 are allowed:

3. The following is an examiner's statement of reasons for allowance:

The prior art does not disclose or suggest the claimed plasma display device particularly characterized by a circuit board containing a switching element for supplying driving current to the plasma display panel wherein the circuit board is provided with a first wiring pattern opposed to a second wiring pattern wherein the driving current in the first wiring pattern proceeds in a direction that is opposite to that in the first wiring pattern.

Applicant's invention is an improved driving current arrangement for a plasma display [e.g. compare Fig. 5 to prior art Fig. 12] that reduces ringing permitting a wider operating voltage range for the plasma display [e.g. compare Fig. 4 to prior art Fig. 11].

The International Search Report is noted as citing "documents of particular relevance" (i.e. "Y" references). However, under U.S. statutes, the cited documents do not constitute prior art that can be used in a proper rejection under 35 USC 102 or 35 USC 103:

Particularly, the International Search Report cites 4 documents:

JP 2001-272944 – Paragraph [0010] cites the use of clamping diodes for reducing spikes; paragraph [0037] states that spike potentials are absorbed by actuation of the circuit; paragraph [0086] states that a clamp diode is formed in the part connected to a junction between first and second maintenance driver circuits, such that spike voltages are reduced by the circuit configuration. There is no suggestion or statement about opposing directions of the driving current in first and second wiring patterns opposed to each other on a circuit board as claimed in the instant invention.

JP 2002-261448 – Paragraphs [0023] and [0041] disclose a capacitor terminal arrangement for reducing undesirable inductance, but do not at all mention or discuss driving current in a plasma display panel, for example.

JP 2002-026246 – Paragraph [0036] discloses an arrangement of adjoining lead frames for reducing parasitic inductance, yet does not mention a plasma display panel or electrical circuit board with first and second wiring patterns opposed to each other and carrying driving current in opposite directions, for example.

JP 07-326536 – Paragraphs [0008] and [0009] disclose a capacitor configuration with opposing current to reduce inductance, yet there is no mention of a plasma display panel with any of the claimed features of a circuit board having driving current.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6,995,521 is cited as background of plasma display panel driving circuitry, yet does not suggest or mention the claimed arrangement of opposing driving current in opposed first and second wiring patterns of a circuit board, for example.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evan Pert whose telephone number is 571-272-1969. The examiner can normally be reached on M-F (7:30AM-3:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sue Purvis can be reached on 571-272-1236. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ETP
February 15, 2007


EVAN PERT
PRIMARY EXAMINER